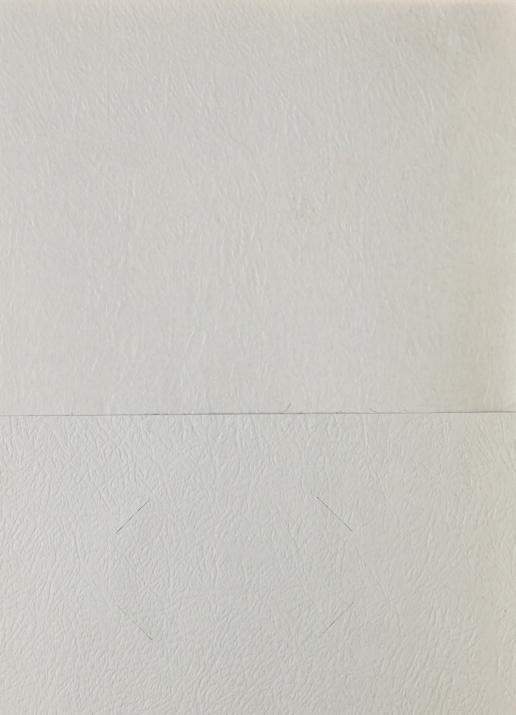
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Government Publications

OJJIBWAY PROVINCIAL PARK BACKGROUND INFORMATION



Ojibway Provincial Park Background Information





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Ministry of Natural Resources Sioux Lookout District Office P.O. Box 309 Sioux Lookout. Ontario POV 2T0

Tel: (807) 737-1140

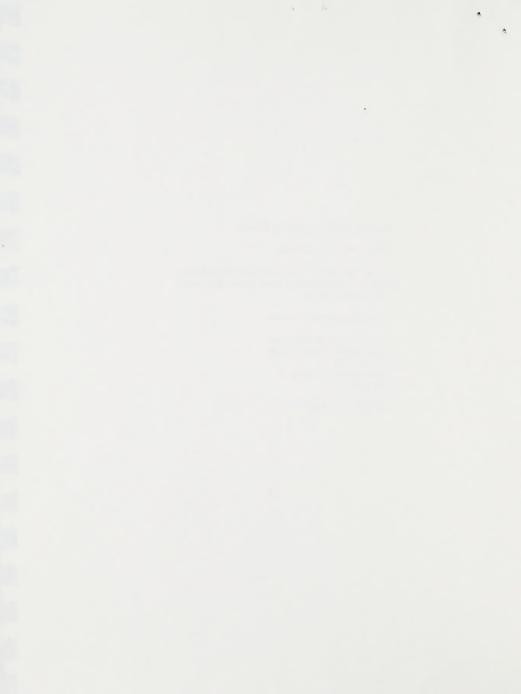


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1.0 INTRODUCTION

The information contained in this report provides the background required to prepare a park management plan for Ojibway Provincial Park. Ojibway Provincial Park was designated under the Provincial Parks Act as a recreation park in 1963, by Ontario Regulation 144/57. Since that time two changes have been made to the Park boundaries. In October 1970, the Park was reduced by 91.0 hectares as a result of the relocation of Highway 72. In January 1971, the boundary was extended by 122 metres into Little Vermilion Lake (except where there are islands, the distance was reduced to midchannel) and included one bay on the east shore of the lake. The Park now encompasses an area of 2630 hectares.

The Park management plan is intended to provide guidance for the management of Park resources and operations over the next twenty year period. The plan will define the role, significance and classification of Ojibway Park within the provincial parks system. It will also provide guidance for the preparation of client services, site development and operating plans that may be required to achieve Park objectives. The plan will ensure that the planning, management and development of the Park is compatible with protection of the Park environment.

The management planning process for the Park commenced in January, 1990, and was initiated in order to:



- 1. identify the goals and objectives of the Park;
- establish policy guidelines for the long term protection, development and management of the Park; and
- 3. resolve any contentious issues.

This Background Information Document represents the second stage in the park management planning process and includes a summary of resource information which has been collected for the Park.

The information contained herein will provide the basis for the preparation of the Preliminary and Final Management Plans for Ojibway Provincial Park.



2.0 REGIONAL CONTEXT

2.1 Access/Transportation

Ojibway Provincial Park is situated twenty-five (25) kilometres southwest of the town of Sioux Lookout on Highway 72 (Fig. 1). The Park is located in the townships of Vermilion, Jordan and Pickerel in the District of Kenora, and is administered by the Sioux Lookout District of the Ministry of Natural Resources.

2.2 Population Centres

The town of Sioux Lookout has a population of approximately 4500. Other communities in the region include Dryden (6500), Vermilion Bay (600), Ear Falls (1,800), Red Lake (2,100), Kenora (10,000), Ignace (3,000) and Pickle Lake (400). During the summer, the area population grows substantially due to an influx of tourists, cottagers, and fishermen, creating a large market for area businesses. These communities provide all the amenities necessary for Park visitors, including alternative recreational opportunities. (see Fig. 1)

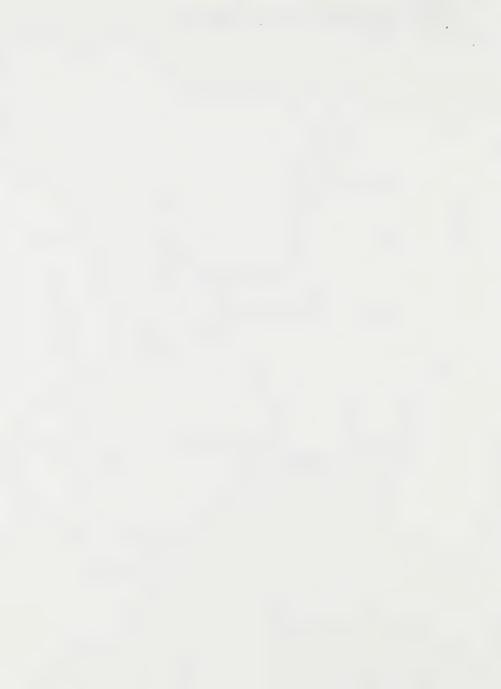
2.3 Land Use

There are four tourist establishments located close to the Park: Fireside Lodge at the east end of Little Vermilion Lake, Minnitaki Lodge and Pickerel Arm Camp south of the Park entrance on Minnitaki Lake, and Timber Edge Camp north of the Park entrance on Butterfly Lake. There is one permanent residence and seven private cottages on the east side of Little Vermilion Lake that are accessed via the



OJIBWAY PROVINCIAL PARK - REGIONAL CONTEXT



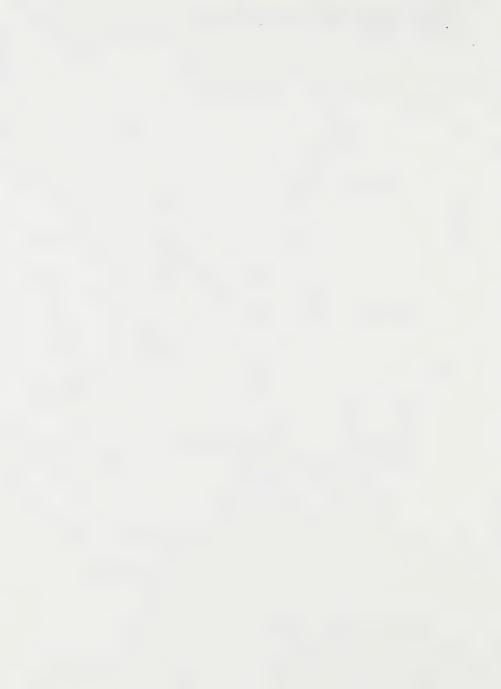


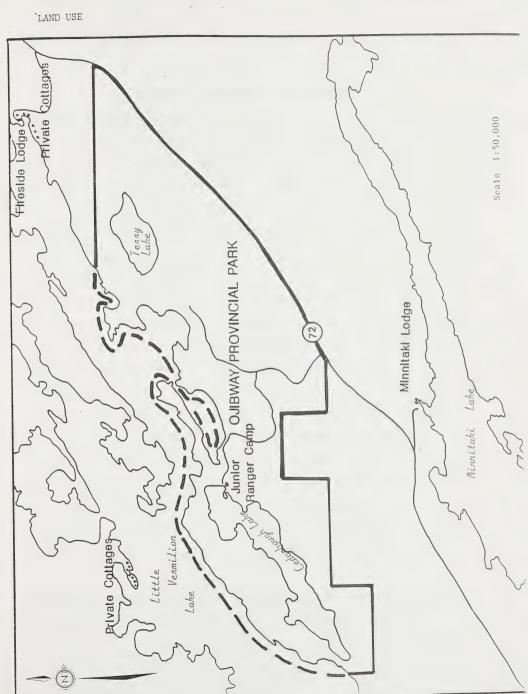
Fireside Lodge road. There are also seven private cottages at the west end of Little Vermilion Lake which are accessed from within Ojibway Provincial Park (Fig. 2).

2.4 Resource Characteristics

The terrain in Ojibway Provincial Park is typical of the Northwestern Ontario Precambrian Shield. The Park is consistent with Rowe's (1972) description of the Upper English River Forest section of the Boreal Forest Region. The forest cover is predominantly black spruce and jack pine with varying amounts of white spruce, balsam fir, trembling aspen, and white birch. Scattered red and eastern white pine are also found throughout the Park.

The Park is inhabited by black bear, moose and smaller mammals such as the striped skunk and snowshoe hare (Appendix C). Many different species of birds also inhabit the Park area, such as birds of prey (e.g. bald eagle), waterfowl (e.g. common loon, mallard and black duck), perching birds (e.g. blue jay, kingfisher) and non-perching land birds (e.g. pileated woodpecker, ruffed grouse) (Appendix B).





-4a-



3.0 LAND TENURE AND DEVELOPMENT

3.1 Land Tenure:

There are presently no alienated forms of land tenure within the Park area. Although the Park was in operation in 1962, the area was not officially designated as Ojibway Provincial Park until 1963. The area around the park is Crown Land with the exception of a few small parcels of patented land.

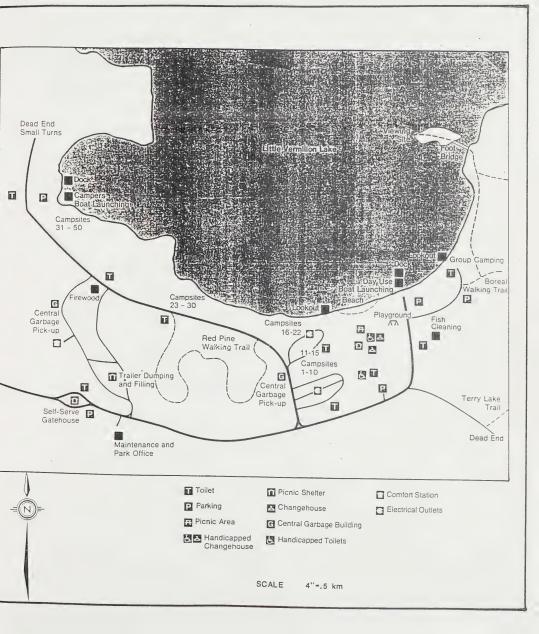
3.2 Existing Park Development

Development of Ojibway Provincial Park is concentrated on the most southerly shores of Little Vermilion Lake. Except for the Terry Lake hiking trail and the Cedarbough Junior Ranger Camp the remainder of the Park is largely undeveloped (Fig. 3). The campground has fifty (50) tent and trailer sites, seventeen (17) of which have electrical hook-ups. A comfort station containing a laundry room, washroom facilities and showers was constructed in 1987 and is centrally located within the campgrounds. There are also vault toilets with wash basins and water taps located throughout the campgrounds. A trailer dumping station is available to campers with pull trailers. A large area designated for group camping is located in the northeast corner of the Park.

The Park includes a day use area which can accommodate one hundred and fifty (150) users per day, with parking space for



OJIBWAY PROVINCIAL PARK PRESENT DEVELOPMENT





fifty (50) vehicles. The day use area is equipped with change houses, washrooms, a picnic area and a pavilion complete with picnic tables and barbecues.

The green meadow provides an abundance of open space for playing games in the day use area, with a playground complex located nearby. The sandy beach provides safe swimming for adults and children and provides another area in which to relax.

Ojibway Provincial Park is also a fisherman's delight. Little Vermilion Lake and Cedarbough Lake offer lake trout, muskellunge and smallmouth bass for anglers, and yellow pickerel can be caught in Terry Lake and nearby Lac Seul and Minnitaki Lakes.

In addition, there are eleven (11) kilometres of self interpretive hiking trails within the park.



4.0 RESOURCES

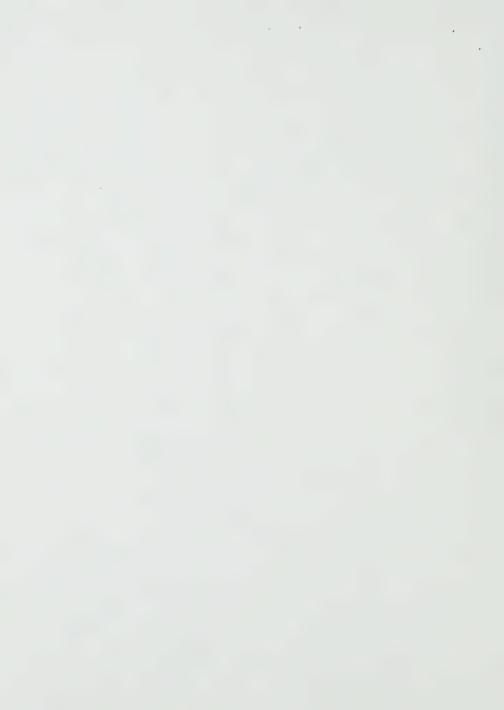
4.1 Climate

The climate in the Ojibway Provincial Park area is classified as modified continental and is characterized by long cold winters and short warm summers. The mean annual temperature is 2.3 degrees Celsius (o C) with a mean daily maximum for July of 24.7 o C and a mean daily minimum for January of -17.3 o C. The mean annual rainfall for Ojibway Provincial Park is 70 centimetres (cm), concentrated in the summer months. The average annual snowfall is 186 cm, giving an average maximum snow depth of approximately 60 cm. The swim season usually starts around the third week of June when the water temperature reaches 18 o C This date may differ from year to year as weather extremes alter conditions.

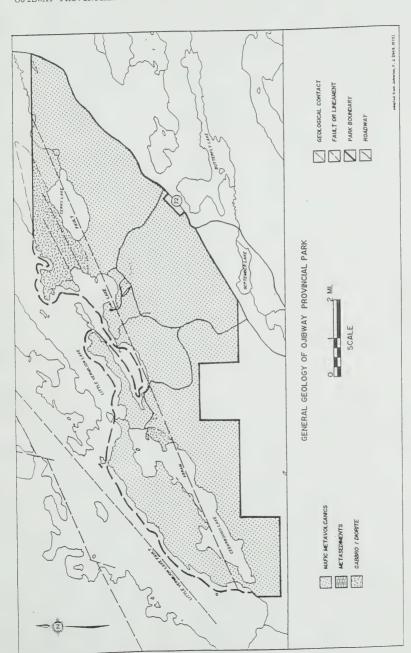
4.2 Earth Science

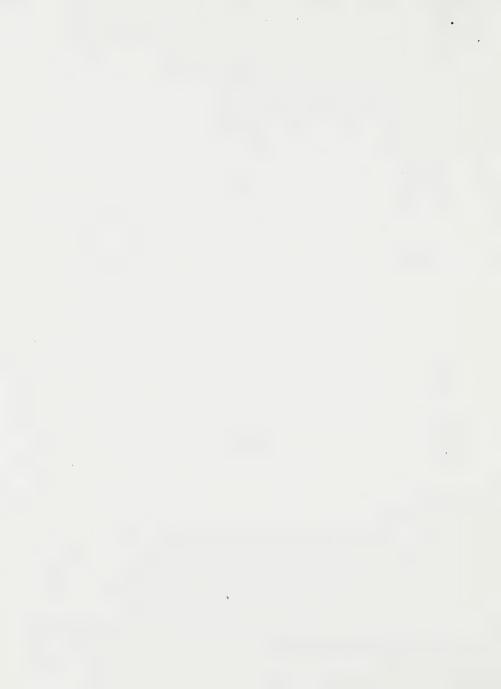
4.2.1 Bedrock Geology

Ojibway Provincial Park lies in the central portion of a vast area of ancient rock known as the Canadian Shield. The Shield forms the foundation of the North American continent and consists of some of the oldest rocks on earth, formed between 2.5 and 3.0 billion years ago. The Shield is divided into a number of provinces and subprovinces based on rock type, structure and age. The Park is situated in the largest of these, the Superior Province, which extends from Lake Winnipeg in Manitoba to Ungava Bay in northern Quebec (Fig. 4).



OJIBWAY PROVINCIAL PARK- GENERAL GEOLOGY





Ojibway Provincial Park is situated within the central portion of the Wabigoon Subprovince and lies within the Minnitaki - Little Vermilion metavolcanic belt.

Two major lineations or faults affect the park area. The Little Vermilion Fault, north of the Park, and the Abram Lake Fault, which cuts through Cedarbough and Terry Lakes. These faults apparently represent southern extensions of the Miniss River Fault Zone, and are accompanied by large horizontal and vertical displacement components.

Three rock types are found within the boundaries of Ojibway Provincial Park (Fig. 4). Mafic metavolcanics are the most wide spread of the rock types. The mafic metavolcanic rock type consist primarily of lava flows that vary in colour from dark green on fresh broken surfaces to tawny beige on the weathered surface. It contains mineral grains averaging less that 1 millimetre (mm) across.

The second most abundant rock type found within the Park boundaries are mafic intrusives called diorites and gabbros. Similar in composition to mafic metavolcanics, these diorites and gabbros intruded into the mafic metavolcanic rock types as molten



masses and then slowly crystallized. As a result these rocks generally have mineral grains larger in size than the mafic volcanic rocks. The third rock type found within the Park is quartz porphyry. Similar to the gabbros and diorites, this rock type is intrusive to the mafic metavolcanic rock types. Quartz porphyry is compositionally related to the granitoid family of rock types, and is most often a white or light coloured rock. It is significant in that it hosts gold and base metal (copper) deposits elsewhere in the Vermilion Lake - Minnitaki Lake area.

4.2.2 Geomorphology

From approximately between 100,000 years Before Present (B.P.) and 15,000 year B.P. northwestern Ontario was affected by the Wisconsin age of continental glaciation. There were several glacial advances and retreats, each eroding and depositing surface material. The surfacial deposits observed today are products of the most recent glacial retreat. In the Ojibway Provincial Park area, the most recent glacial retreat started approximately 15,000 years B.P.

As the ice retreated, a layer of debris, glacial till, was deposited over most of the area. Water flowing off of the glacier formed rivers and streams, which eventually ponded to form small lakes. The movement of the water reworked some of the glacial till resulting in river and lake bottom deposits. With the continuing retreat of the glaciers, the large volume of run-off water caused



lakes to enlarge and coalesce into a single lake, Glacial Lake Agassiz. Highlands were washed clear to the bedrock surface and lower areas were covered with fine silt and clay.

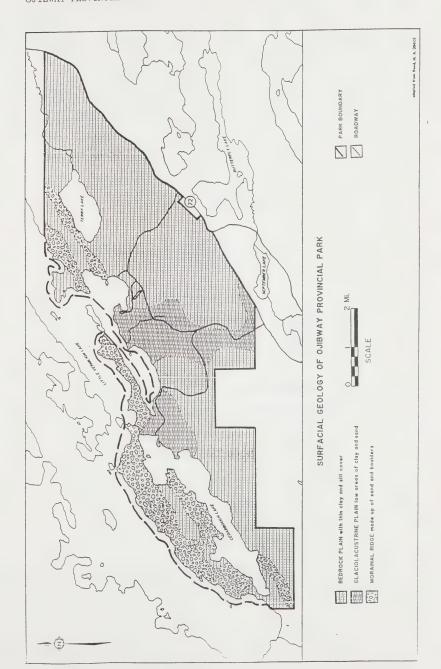
According to Roed (1980), two classes of surfacial material are found within the boundaries of Ojibway Provincial Park (Fig. 5). Both classes of surfacial material recognized by Roed (1980) are the products of lake bottom sedimentation. The most widespread is a relatively thin sheet of clayey and silty material that was spread over a low undulating bedrock surface. The second class of surfacial material is composed of clay and sand that was deposited in low areas of the park. It is found in two areas within the park:

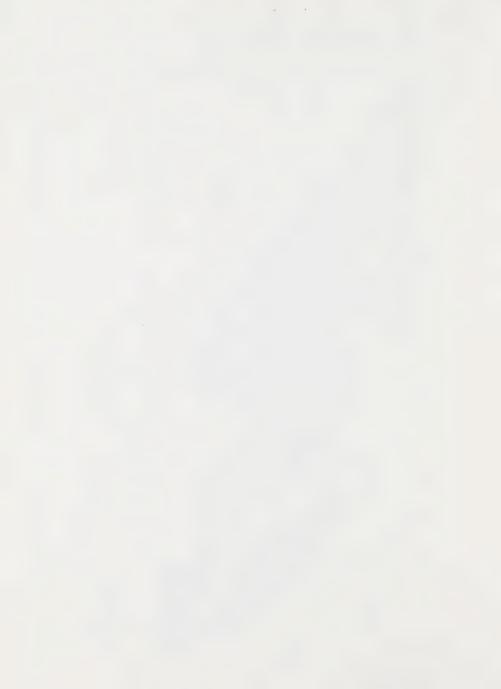
- 1. in a triangular wedge at the east end of Cedarbough Lake; and
- in a north/south trough stretching from west of the campsite area south to September Lake.

A third class of surfacial deposits were found within the Park during the earth science inventory conducted in 1977 and consist of morainal ridges made up of sand and boulders. Two long sinuous ridges run east-northeast parallel to the south shore of Little Vermilion Lake. One of the ridges forms a peninsula along the south side of the lake and the camping area. Bedrock mapped at the end of this peninsula suggest that the ridges may have formed as sand and boulder till piled up on a pre-existing ridge of bedrock.



OJIBWAY PROVINCIAL PARK - SURFICIAL GEOLOGY





4.2.3 Soils

Soil deposits are thin and discontinuous throughout the Park. They consist of stony sand over bedrock on the high areas and silt and clay on the slopes and in the depressions. Clay banks, up to 2 m thick, occur near the shore of Little Vermilion Lake at various localities. Commonly, the shoreline is lined with boulders on white to tan rippled sand. A section of deep, coarsely stratified sand/gravel/silt with clay lenses occurs in a gravel pit near the Junior Ranger Camp northeast of Cedarbough Lake.

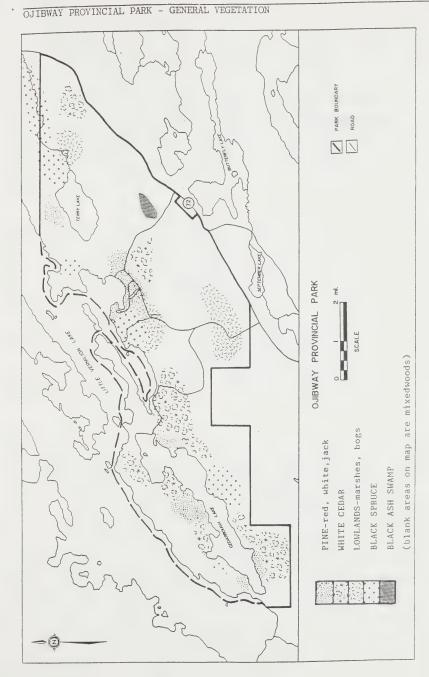
4.3 Life Science Features

4.3.1 Vegetation

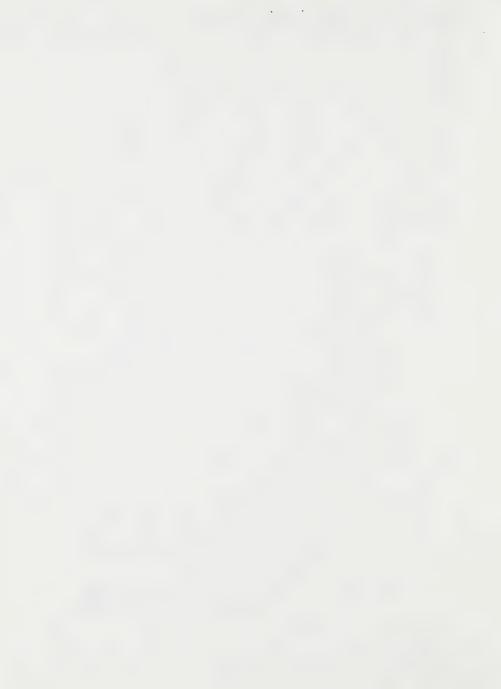
The vegetation of Ojibway Provincial Park is consistent with Rowe's (1972) description of the Upper English River Forest Region.in that the forest cover consists of "black spruce (<u>Picea</u>

mariana) and jack pine (Pinus banksiana) with mixtures of white spruce (Picea glauca), balsam fir (Abies balsamea) trembling aspen (Populus tremuloides) and white birch (Betula papyrifera) (Fig. 6). Jack pine stands are extensive on the dry sand plains and rocky uplands, with black spruce dominating the peat filled depressions; mixtures of the two species are frequent in intermediate habitats. Red and eastern white pine, at the northern limit of their ranges, are found as scattered individuals or isolated clumps. The vegetation of Ojibway Provincial Park is a mosaic of differing communities and ecosystems which often overlap and blend with each other. The best term used to define the overall area would be





-lla-



"mixed wood" (Appendix A).

The lowland swamp areas which tend to be fairly numerous in the park, are dominated by white cedar (<u>Thuja occidentalis</u>) with an occasional tamarack (<u>Larix laricina</u>). Dense black spruce swamps are common in depressed areas along the shoreline of Little Vermilion Lake.

The campground area of the Park is located in a mixed upland forest with a dense understorey of balsam fir. Between 1948 and 1949 timber harvesting operations were carried out over a large portion of the area in which Ojibway Provincial Park is now located. Harvesting practices of the period, primarily high grading for high quality jack pine and white spruce sawlogs, favoured the establishment of balsam fir which has since become the predominant species.

The recent epidemic level of the defoliator spruce budworm (Choristoneura fumiferana) has resulted in significant damage and mortality to the highly vulnerable balsam fir forest cover. The Ojibway Provincial Park Interim Management Statement, approved in March 1988, identifies the need to undertake a vegetation management plan to address this problem. The Statement identified active vegetation management as a primary means of reducing the impact of spruce budworm and achieving Park objectives.



Also found within the Park is a natural stand of wild rice. This tall annual aquatic grass grows in shallow lakes and rivers or near the inlets or outlets of larger lakes. Within Ojibway Provincial Park there are approximately 8 hectares of wild rice, with 2,093 pounds available for harvest. Over the past fifteen years up to 600 pounds of rice have been harvested annually by local native people.

A Vegetation Management Plan will outline the specific techniques and operations which will be used to manage the Parks vegetation and reduce the impact of defoliation by spruce budworm.

4.3.2 Wildlife

The variety of ecosystems and stages of forest development in the Park present a wide range of available habitats for wildlife species. The varied wildlife which exists in the Park includes small mammals such as the red squirrel (Tamiasciurs hudsonicus), larger mammals such as the moose (Alces alces), black bear (Ursus americanis), beaver (Castor canadensis) and snowshoe hare (Lepus americanus). In accordance with Provincial Policy, hunting and trapping are not permitted within the Park boundary. An active Heron (Ardea herodias) rookery is situated at the northwest end of Cedarbough Lake, and contains between 10-12 active nests.



4.3.3 Aquatic Resources

The Park boundary extends 122 m into Little Vermilion Lake and includes one bay along the east shore of the lake. Terry and Cedarbough Lakes are completely encompassed within the Park. There is a variety of fish in Little Vermilion and Cedarbough Lakes including lake trout (Salvelinus namaycush), muskellunge (Esox masquenongy), and small mouth bass (Micropterus dolomieui). Terry Lake has both a yellow pickerel (Stizostedion vitreum) and a northern pike (Esox lucius) population. The Sioux Lookout District Fisheries Management Plan has identified Little Vermilion and Cedarbough Lakes as being overharvested fisheries. In 1989, the daily catch limit for lake trout was reduced to two fish from three, and there is now a minimum length limit on muskellunge.

4.4 Cultural Resources

George E. Farlinger ran the first commercial lumber operation in the region and had a direct impact on the land that was to become Ojibway Provincial Park. By 1910 he established mills at Hudson and on the shore of Pelican Lake at Sioux Lookout. The company originally cut timber south of Minnitaki Lake around Amik and Basket Lakes but due to increasing expenses, Big and Little Vermilion Lakes became the new harvesting sites. In 1948 and 1949 timber harvesting operations were carried out over a large portion of the area where Ojibway Provincial Park is located. Harvesting practices of the period consisted of high grading for high quality jack pine and white spruce for sawlogs.



The demand for recreational opportunities, especially cottages, began in the mid 1920's. It concentrated on locally accessible lakes with preferences for islands. The first "camp" in the area was established by the "father" of the tourist industry in Sioux Lookout, Mike Ament. In the mid 1930's he purchased and operated the Moberly Inn on the east end of Little Vermilion Lake. The same establishment is now known as Fireside Lodge and is still in operation today.

Existing evidence indicates archaeological sites located within the Park boundary (Fig. 7). These sites represent the Laurel, Selkirk, Woodland, Archaic and Blackduck cultural occupations. From these sites a variety of artifacts including flakes, lithics, tools and ceramics, have been collected and documented. Management priorities will be to ensure the protection of these sites.

5.0 MARKET ANALYSIS

During 1989 Ojibway Provincial Park received 7,462 visitors with sales of 1,495 campsite permits and 575 day-users permits. Based on 1989 statistics, the average camping party size was 3.0 people and the average length of stay was 1.6 days. Campsite occupancy in the park during July and August of 1989 was 32%; an increase of 4% over the previous year.



The majority of campers are repeat visitors from the United States (Minnesota, Wisconsin, Illinois) and consider the Park as their main destination. There has also been an increase in campers from Manitoba in recent years.

Day use visitors in 1989 totalled 2,695 people, compared to 2,714 people in 1988. These individuals are primarily from the local area and partake in swimming, sunbathing and picnicking opportunities within the Park. Over the past three years there has been a 10% increase in Park visitors, although day users dropped slightly in 1989.

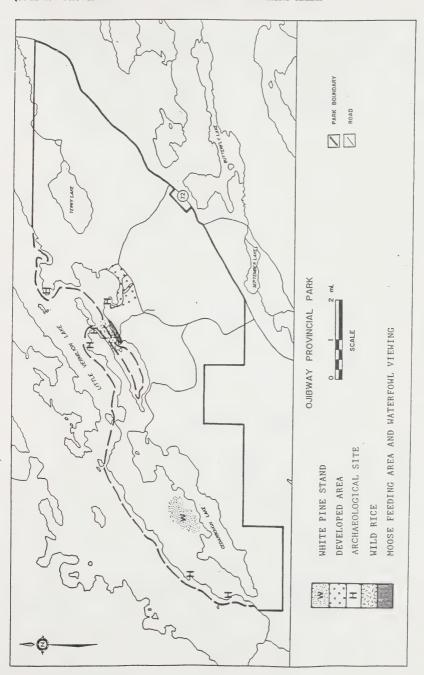
6.0 PHYSICAL CONSTRAINTS

The existing developed area is approximately 163 hectares in size and encompasses only a small portion of the 2630 hectares of the Park. Any additional development will be restricted to the existing developed area in order to reduce impact on the remainder of the Park. (Fig. 7)

Ojibway Provincial Park is a refuge for a diverse cross section of wildlife species. (eg. Heron Rookery, Moose aquatic feeding area, water fowl viewing, etc.) (Fig. 7) These areas will be managed for both educational and interpretive purposes.



OJIBWAY PROVINCIAL PARK - DEVELOPMENT CONSTRAINT AREAS





A unique stand of white pine is located on the north side of Cedarbough Lake. These mature trees are approximately 120 years old and have attained basal diameters of approximately one meter and heights of 30-40 meters. This isolated stand has interpretive and educational value. (Fig. 7)

Six archeological sites are located within the Park boundary. These prehistoric sites provide important historical information relevant to the Park and surrounding areas. The areas will be used as interpretive, educational and possibly research sites. (Fig. 7)

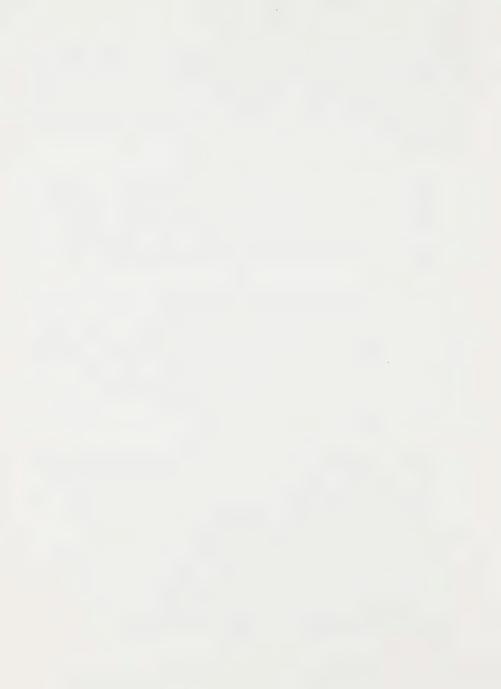
The inlet known as "Chicago Bay", on the south side of Little Vermilion Lake, is extremely shallow and weedy with a clay bottom supporting a natural wild rice stand which is harvested annually by the local Natives. This feature within the Park has a life science significance from an interpretive and educational perspective. (Fig. 7)

7.0 PLANNING ISSUES

This section identifies issues of concern that will be addressed during the planning process and resolved in the Park Management Plan. More issues may surface following public consultation.

The following issues have been identified to date:

- 1) vegetation management with regard to spruce budworm damage;
- 2) long term protection and identification of Park values;
- 3) the demand for additional electrical sites;
- 4) the need to diversify recreational opportunities;



- 5) the need to identify additional recreational user groups;
- 6) the impact of park users on the overharvest of lake trout from Little Vermilion Lake; and,
- 7) the role of Cedarbough Junior Ranger Camp within the Park.



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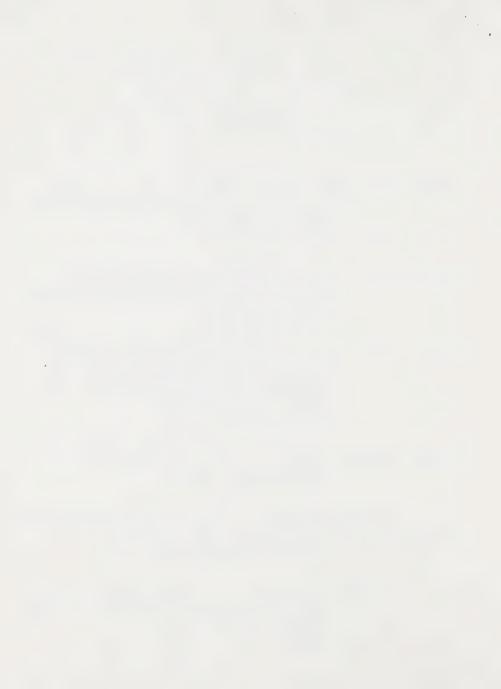
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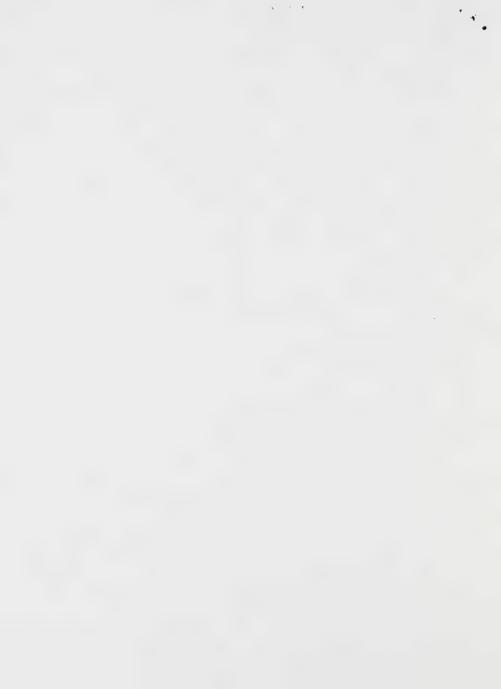
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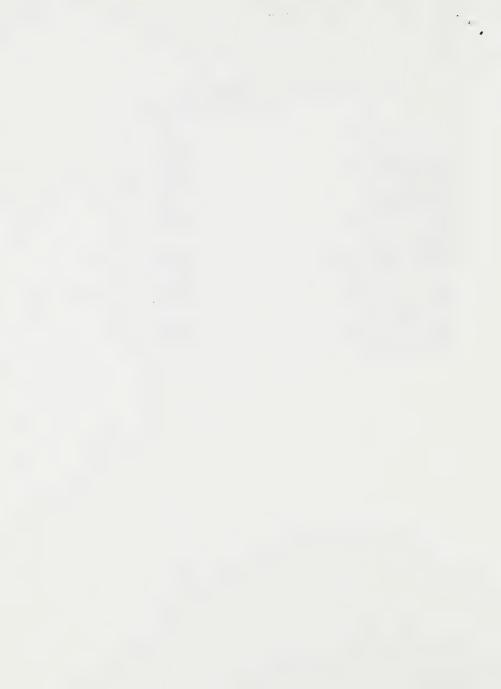
APPENDIX A PLANTS OF OJIBWAY PARK

Scientific Name

Abies balsamea Betula papyrifera Fraxinus nigra Picea glauca Picea mariana Pinus banksiana Pinus resinosa Pinus strobus Populus balsamifera Populus tremuloides Prunus pensylvanica Sorbus decora Thuja occidentalis Acer spicatum Alnus spp Ledum groenlandicum Typha latifolia Zizania aquatica

Common Name

Balsam Fir White Birch Black Ash White Spruce Black Spruce Jack Pine Red Pine White Pine Balsam Poplar Trembling Aspen Pin Cherry Mountain Ash Eastern White Cedar Mountain Maple Alder Labrador Tea Cattail Wild Rice



APPENDIX B

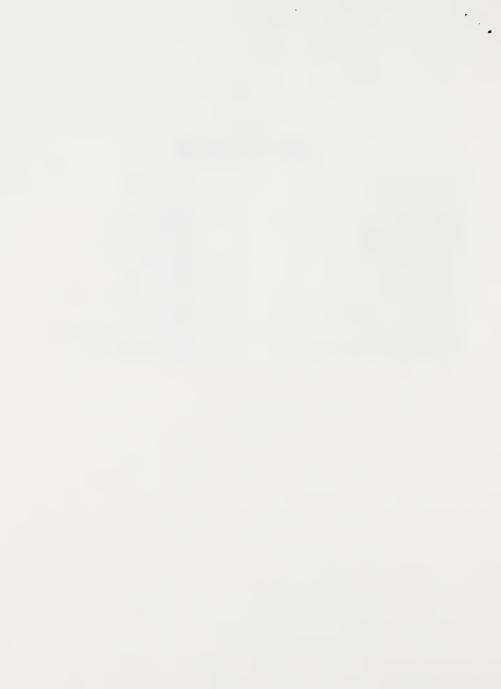
SOME BIRDS SEEN IN OJIBWAY PROVINCIAL PARK

Scientific Name

Gavia immer
Bucephala clangula
Bonasa umbellus
Canachites canadensis
Strix nebulosa
Corvus corax
Corvus brachyrhynchos
Cathartes aura
Sphyrapicus varius
Perisoreus canadiensis
Megaceryle alcyon
Parus atricapillus
Hesperiphona vespertina
Ardea herodias

Common Name

Common Loon
Golden-eye Duck
Ruffed Grouse
Spruce Grouse
Great Gray Owl
Common Raven
Common Crow
Turkey Vulture
Yellow Bellied Sapsucker
Canada Jay
Kingfisher
Black Capped Chickadee
Evening Grosbeak
Great Blue Heron



1 1 1 3

APPENDIX C

MAMMALIA

Scientific Name

Alces alces
Ursus americanus
Mephitis mephitis
Lepus americanus
Tamias striatus
Tamiasciurus hudsonicus
Castor canadensis
Ondatra zibethica
Vulpes fulva

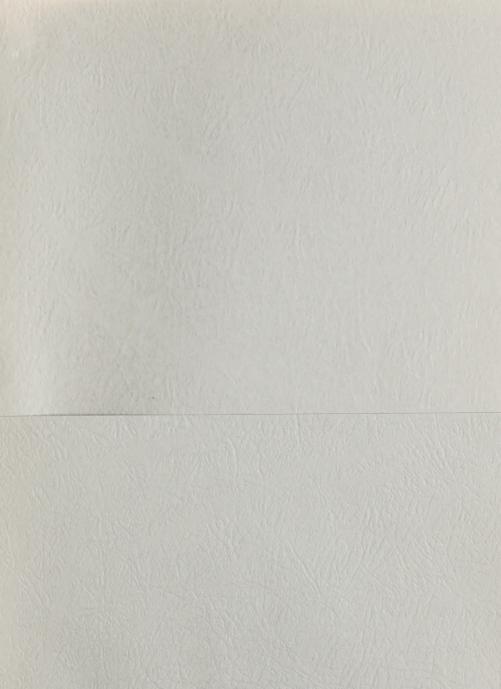
Common Name

Moose
Black Bear
Striped Skunk
Snowshoe Hare
Eastern Chipmunk
Red Squirrel
Beaver
Muskrat
Red Fox











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